

REMARKS

Applicants greatly appreciate the conscientious consideration and courtesy extended by the Patent Office.

Applicants have carefully reviewed and considered the Office Action dated September 26, 2001, and the references cited therein. In response, Applicants have amended the drawings and the specification to correct various informalities regarding the use of reference numerals. No new matter has been added by way of these amendments.

Applicants have also canceled without prejudice claims 1-22. Applicants have amended claim 23 in order to refine the claimed invention without narrowing its scope. In addition, applicants have added claims 30-57 to further define the invention. These claims are added for the purpose of better claiming the invention rather than adding limitations with respect to the prior art.

Applicants believe that the application is now in condition for allowance. Accordingly, favorable reconsideration in light of the following remarks is respectfully requested.

Claims 8, 10-12, 14-20, and 22 stand rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. The Examiner contends that in these claims it is unclear what structural limitations are added to further define the invention. Claims 8, 10-12, 14-20, and 22 are also objected to under 37 C.F.R. § 1.75(c) as being in improper dependent form for failing to further limit the subject matter of a previous claim. Since Applicants have canceled claims 1-22 without prejudice, this rejection and the objection are believed to be moot.

Claims 1-3 and 6-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,096,008 to Taylor. Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Taylor. Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Taylor in view of U.S. Patent 5,882,457 to Currie, U.S. Patent 4,804,426 to Okuyama, and U.S. Patent 5,292,398 to Miyamoto.

Since Applicants have canceled without prejudice claims 1-22, those rejections are believed to be moot. Applicants submit that claims 35-57 are patentable over this art. None of the cited references discloses the integrated systems, including various parts thereof, as in the pending claims. The examiner has further failed to demonstrate any suggestion and motivation to combine the references, other than by impermissible hindsight, as has been done in the present instance.

Claims 23-24, 26, and 29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,096,008 to Taylor. Claims 25, 27, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Taylor in view of U.S. Patent 5,458,727 to Meyer.

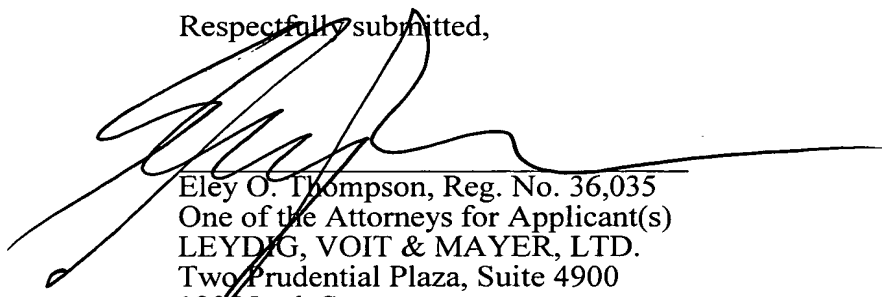
Applicants have amended claim 23 without narrowing its scope. The amendment serves to merely refine the claimed invention and to clarify the invention. As with the other amended claims, Applicants submit that the claims are patentable over the prior art in either form. The examiner has further failed to demonstrate any suggestion and motivation to combine the references, other than by impermissible hindsight, as has been done in the present instance.

Applicants also have added claims 30-57 to further define the invention. Applicants respectfully submit that these claims are patentable over the cited references as none teaches the claimed apparatus.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



Eley O. Thompson, Reg. No. 36,035
One of the Attorneys for Applicant(s)
LEYDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson
Chicago, Illinois 60601-6780
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

Date: March 22, 2002

In re Appln. of Gridley et al.
Application No. 09/492,602

CERTIFICATE OF MAILING

I hereby certify that this RESPONSE TO OFFICE ACTION (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

Date: 3-22-02

Cindy B. Dwyer

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Gridley et al.

Application No. 09/492,602

Art Unit: 1733

Examiner: J. Fischer

Filed: January 27, 2000

For: METHOD AND APPARATUS FOR
RETREADING TIRES

**AMENDMENTS TO SPECIFICATION, CLAIMS, AND ABSTRACT
MADE IN RESPONSE TO OFFICE ACTION DATED SEPTEMBER 26, 2001**

Amendments to the paragraph beginning at page 11, line 20:

As depicted in FIG. 4, casing 22 has a curved crown section 27. Crown 27 is substantially the surface to which cushion gum 34 is applied. In an exemplary embodiment, cushion gum 34 has a polyethylene protective layer 35 adhered thereto, to prevent adhesion to other layers of cushion gum while rolled and to prevent adhesion to application rollers 40 during application. The controlled stretching of cushion gum 34, by the differential velocity introduced by gears 37, provides improved conformity of cushion gum 34 to the contoured crown [23] 27 of casing 22. The improved conformity provides uniform adhesion and contact of cushion gum 34 to crown [23] 27 causing the cushion gum edge to substantially contact casing 22 wrinkle-free and further reduces the need for providing extra strips of cushion gum along shoulders 21 of crown [23] 27 (i.e., cushion gum stripping).

Amendments to the paragraph beginning at page 12, line 6:

After cushion gum 34 has been applied to casing 22, rollers 40 are moved to engage and provide a force onto cushion gum 34. Casing 22 is rotated while rollers 40 provide a force, in a direction indicated by arrow [37] 38 in FIG. 4, onto cushion gum 34. In an exemplary embodiment, wheels 40 begin in the middle of crown [23] 27 and, during subsequent rotations, wheels 40 are moved towards shoulders 21 of crown [23] 27 in the directions indicated by arrows 41. This operation, often referred to as stitching,

provides desirable adherence of cushion gum 34 to the surface of casing 22 (crown 27 and shoulders 21), while aiding in removing any trapped air pockets between cushion gum 34 and casing 22. After the stitching operation is completed, a measurement of the circumference of tire casing 22 plus cushion gum layer 34 is taken by measurement wheel 50 as casing 22 is rotated. Polyethylene layer 35 is then removed.

Amendments to existing claims:

23. (Amended) A method of retreading tires, comprising:
- mounting a tire casing on a hub, the hub being rotatable;
 - applying [stretching] a length of cushion gum around the circumference of the tire casing, said cushion gum being dispensed at a linear velocity that is less than the tangential velocity of the periphery of said tire casing such that the cushion gum adheres to said tire casing as a result of stretching of the length of cushion gum [the stretch] being controlled during application;
 - measuring, automatically, the circumference of the tire casing [with the cushion gum applied];
 - dispensing, automatically, a length of tire tread based on the measured circumference of the tire casing [with the cushion gum applied];
 - adjusting the length of said tire tread so that, after being cut, first and second ends of the tire tread will provide a substantially continuous tread design when brought together on the casing;
 - cutting said length of tire tread; and
 - applying the cut length of tire tread to the tire casing [the cushion gum], wherein the applying [stretching], measuring, dispensing, providing, and applying are performed on an integrated machine.